TEJUS
CONSULTANTS

No. EE(project)/YnkZone/WO/155 / 17 – 18 Date:

To
The Executive Engineer (Project Division)
Yelahanka Zone,
Bruhat Bangalore Mahanagara Palike,
Bangalore.

Dear Sir

Sub: **Second and Final Bill for the work of Improvements to DWCC in Ward No. 08 and other SWM works in Kodigehalli.**

In reference to the above subject, this is to bring to your kind notice that we have scrutinized the **First RA bill** submitted by M/s. KRIDL, Bangalore, towards the above said work and arrived at an amount of **Rs. 0/-(Rupees Zero only**). The work has been completed satisfactorily.

This is for your kind information.

Thank you and assuring you the best of our Services at all the times

TEJUS CONSULTANTS

For Tejus Consultants
(Nischal M)

Name of the work: Improvements to DWCC in Ward No. 08 and other SWM works in Kodigehalli.

Contractor/Agency : M/s. KRIDL.

Name of the Client : BBMP

Estimated Cost : 1.75 Crore

Status of Bill : 2nd and Final Bill

In the Presence of : (a) Mrs. Priyadarshini
Assistant Engineer, BBMP, Bangalore.
: (b) Mr. Chidananda
Assistant Executive Engineer, BBMP, Bangalore
: (C) Mr.Darshan Kumar K H, Site Engineer
M/s Tejus Consultants

Item No	Description of Item	Comments/observation
1	KSRRB 200-9. Clearing and grubbing road land including uprooting rank vegetation, grass, brush, shrubs, saplings and trees of girth upto 300mm, by manual means, in area of thorney jungle, removal of stumps, disposal of unserviceable materials, stacking of serviceable materials labour charges complete as per specifications. MORTH / Chapter 2(P.No.136, I.No.18.12 of PW,P&IWTD S.R 2017-17)	Work done up to the billed quantity and quality is satisfactory
2	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for levelling and lowering the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeeding 50 m and lift upto 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled after breaking of clods and nealty dressed as per specifications. Specification No.KBS 2.1(a)/2.3.1. (P.No.5, I.No.2.1 of PW,P&IWTD S.R 2017-17)	Work done up to the billed quantity and quality is satisfactory

TEJUS CONSULTANTS

3	KSRB 2-2.1: Earthwork excavation for foundation of buildings, culverts, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m.and above in width, in ordinary soil not exceeding 1.5m.in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications. Specification No.KBS 2.1(a)/2.3.5. (P.No.5, I.No.2.3 of PW,P&IWTD S.R 2016-17)	Work done up to the billed quantity and quality is satisfactory
4	KSRB 2-2.2: Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m.and above in width, in hard soil not exceeding 1.5m.in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications. Specification No.KBS 2.1(a)/2.3.5. (P.No.5, I.No.2.4 of PW,P&IWTD S.R 2016-17)	Work done up to the billed quantity and quality is satisfactory
5	KSRB 4-1.3: Providing and laying in position plain cement concrete of mix M 7.5 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.85 cum and fine aggregates @ 0.57 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.3 of PW,P&IWTD S.R 2016-17)	Work done up to the billed quantity and quality is satisfactory
6	KSRB - 5.2.3: Providing and constructing granite size stone masornry in foundation cement mortar 1:6, stone hammerd dressed in courses not lss than 20 cms high, bond stones at two m.apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13. (P.No.23, I.No.5.6 of PW, P&IWTD SR 2016-17)	Work done up to the billed quantity and quality is satisfactory
7	KSRB - 5.3.3: Providing and constructing grantie / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 (P.No.23, I.No.5.9 of PW, P&IWTD SR 2016-17)	Work done up to the billed quantity and quality is satisfactory
8	KSRB - 4-1.6: Providing and laying in position plain cement concrete of mix M-15 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates at 0.78cum and fine aggregates at 0.459 cum,	Work done up to the billed quantity and quality is satisfactory

	machine mixed, concrete laid in layers not exceeding 15 cms.thick, well compacted, in foundation, plinth and cills including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2. (P.No.12 I.No.4.6 of PW,P&IWTD SR 2016-17)	
9	KSRB 4-6.1: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (P.No.15, I.No.4.28 of PW,P&IWTD SR 2016-17)	Work done up to the billed quantity and quality is satisfactory
10	KSRB - 4.6.4: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (P.No.15, I.No.4.31 of PW, P&IWTD SR 2016-17)	Work done up to the billed quantity and quality is satisfactory
11	KSRB 4-6.5: Providing and removing centering, shuttering, strutting, propping etc., for columns, pillars, piers, abutments, post and struts, square / rectangular / polygon in plan including cost of all materials, labour complete as per specification. Specification No. KBS 4.6.2. (P.No.16, I.No.4.32 of PW,P&IWTD SR 2016-17)	Work done up to the billed quantity and quality is satisfactory
12	KSRB 4-6.7: Providing and removing centering, shuttering, strutting, propping etc., an removal of form work for sides and soffits of beams, beam haunchings, cantilever, girders, bressumers and lintels not exceeding 1m in depth including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (P.No.16, I.No.4.34 of PW,P&IWTD SR 2016-17)	Work done up to the billed quantity and quality is satisfactory
13	KSRB - 4.2.8: Providing and laying in position reinforced cement concrete of design mix M 20 with OPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878cum and fine aggregates @ 0.459cum, with superplastisiser @ 3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for R.C.C beams, columns of all sizes in foundation plinth and superstructure ground floor level for roof slabs, staircase, lintels, columns, including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Speceification No. KBS 4.1,4.6. (P.No.14, I.No 4.13 of PW, P&IWTD S.R 2016-17)	Work done up to the billed quantity and quality is satisfactory

TEJUS CONSULTANTS

14	KSRB 4.2.10: Providing and laying in position reinforced cement concrete of design mix M 20 with OPC cement @ 24kgs, with 12mm and down size graded granite metal coarse aggregates @ 0.5175cum and fine aggregates @ 0.345cum, with superplastisiser @ 0.225lts machine mixed, well compacted for plain chajja of 7.5cms average thickness, upto ground floor level, including cost of all materials, labour, HOM of machinery, finishing, curing, complete as per specifications. Specification No.KBS 4.1, 4.6. (P.No.14, I.No.4.19 of PW,P&IWTD SR 2016-17)	Work done up to the billed quantity and quality is satisfactory
15	KSRB - 4.9.2: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 (P.No.17, I.No.4.46 of PW, P&IWTD SR 2016-17) (Rate As per Quarter rate issued by the PWD on 01-07-2017)	Work done up to the billed quantity and quality is satisfactory
16	KSRB 5-14: Providing and constructing Precast concrete solid blocks with compressive strenght not less than 35Kg/sqm with cement mortar 1:4 masonry (quion, Jamb, closer blocks) with solid concrete blocks of size 40x20x20cms confirming to IS:2185/1965 in superstructure including cost of materials, labour charges, scalffolding, curing etc., complete as per specifications. (P.No.25, I.No.5.27.1 of PW,P&IWTD SR 2016-17)	Work done up to the billed quantity and quality is satisfactory
17	KSRB 15-3.9: Providing 18mm thick cement plaster in single coat with cement mortor 1:6, to brick masonry including rounding off corners wherver required smooth rendering, Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications.(P.No.114, I.No.15.17 of PW,P&IWTD SR 2016-17)	Work done up to the billed quantity and quality is satisfactory
18	Water proofing the inside surface of tanks (OHT & UGT) - applying of modified polymers soft acrylic esters coat @0.40 kg/sqm in 2 coats including all labour charges tools and equipments, all complete as per the specification.. (P.No.67, I.No.10.5.3 of PW,P&IWTD SR 2016-17)	Work done up to the billed quantity and quality is satisfactory
19	KSRB 15-3.3: Providing 12mm thick cement plaster in single coat with cement mortor 1:6, to brick masonry including rounding off corners wherver required smooth rendering, Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. (P.No.113, I.No.15.11of PW,P&IWTD SR 2016-17)	Work done up to the billed quantity and quality is satisfactory

20	KSRB - 15-7: Providing lime rendering for plastering to wall and ceiling, including cost of materials, labour, curing complete as per specifications. (P.No.115, I.No.15.33 of PW,P&IWTD SR 2016-17)	Work done up to the billed quantity and quality is satisfactory
21	KSRB 15-16.1: Providing and finishing external walls in two coats with water proof cement paint of approved brand and shade to give and even shade after throughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour, complete as per specifications. (with primer) (P.No.118, I.No.15.53.2 of PW,P&IWTD SR 2016-17)	Work done up to the billed quantity and quality is satisfactory
22	KSRB 15-15.1: Providing and applying painting in two coats with plastic emulsion paint of approved brand and shade on wall surface to give an even approved shade after throughly brushing the surface, free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour, complete as per specifications. (With primer) (P.No.117, I.No.15.51.2 of PW,P&IWTD SR 2016-17)	Work done up to the billed quantity and quality is satisfactory
23	KSRB 14.7-2 : Providing and laying red oxide flooring 40 mm thick, with an under layer of 30mm thick M-15 cement concrete, using broken granite metal of 12.5mm nominal size and top layer of 10mm thick plaster with 1:3 cement mortar mixed with red oxide (using 3.5 kg of red oxide per 50 kg of cement) finished with floating coat of neat cement mixed with red oxide (mix of same proportion) , including cost of materials, labour, curing, complete as per specifications. Specification No. KBS 14.3 (P.No.102, I.No.14.9. of PW,P&IWTD SR 2012-17)	Work done up to the billed quantity and quality is satisfactory
24	KSRB - 7.9: Providing and fixing M.S.grill work for windows and ventilators weighing 21 kg/sqm using M.S. flats, or M.S.square rods, or combination of M.S.flats and square rods as per approved design, drawing including cutting steel sections and welding the same to required pattern with a coat of red lead primer, cost of materials, fixtures, labour and HOM of machinery complete as per specifictions. Specification No. KBS 7.12 (P.No.32, I.No.7.9 of PW, P&IWTD SR 2016-17)	Work done up to the billed quantity and quality is satisfactory
25	KSRB 15-18.2: Providing and applying enamel metal paint two coats (Excluding priming coat) over new steel or other metal surface brushing to give an even shade after cleaning oil, grease, dirt and other foreign matter, including cost of materails, labour, complete as per specifications.(P.No.121 I.No.15.74 of PW, P&IWTD S.R 2016-17)	Work done up to the billed quantity and quality is satisfactory

TEJUS CONSULTANTS

26	KSRB - 7.10:Providing and fixing in position anodized aluminium windows and ventilators as per approved drawings with sliding shutters using double track window frame section of size 61.85x31.75mm.with 1.2mm thick, bottom section weight 0.695 kg/m, sides and top sections 1.3mm, thick weight 0.659 kg/m; and shutter comprising top and bottom section of size 40mmx18mm, 1.25mm thick 0.417 kg./m; shutter outer side 40mmx18mm, 1.25mm.thick weight 0.417 kg/m, shutter interlock section 40mmx26.7mm, 1.1mm thick,weight 0.469 kg/m. the shutters mounted on nylon rollers with approved quality of fixtures such as aluminium handles tower bolts etc.; and providing and fixing 5.5mm.thick plain glass for shutters fitted with rubber beading aluminium sections anodised 12 to 15 microns, including cutting to required length, joints mitred subdividing the frame tennoned and rivetted in the assembled frame stiffened with end clip at corners angles etc., and fixed to the walls, lintels, floor beams/cills as the case may be with necessary steel screws, raul plugs, or teak wood gatties including cutting masonry or concrete and making good the original surface using cement mortar, aluminium sections pretreated for removal of any rust and coated with greasy for non adhesion of mortor and other sticky materials: (this coating should be cleaned after installation) inclduing cost of materials, fixutres, labour and HOM at machinery compelte as per specification no. KBS. Using aluminium section powdered coated to a minimum of 60-70 microns with exterior durable pure polyster grade powder of approved quality. (P.No.32 & 33, I.No.7.10.2 of PW,P&IWTD SR 2016-17)	Work done up to the billed quantity and quality is satisfactory
27	KSRB 7.3 : Providing and fixing 1mm thick M.S. sheet garage door with frame and diagonal braces of size 40x40x6 mm angle Iron, 3.15mm thick M.S. Gusset plates at the junctions and corners, with handles, stoppers and locking arrangements etc., including applying a priming coat of red lead paint cost of materials, labour, HOM of machinery complete as per specifications. Double leaf door of size 2.4x2.4m. Specification No. KBS 7.9 / 7.12. (P.No. 31, I.No. 7.3 of CSR 2016-17)	Work done up to the billed quantity and quality is satisfactory
28	Providing and fixing factory made single leaft rigid GRP Sandwich composite door shutter of 32mm thick, laminated with two GRP skins with wood grain finish, fabricated using U.V-stabilized Isophalic Gelcoat and on layer of 45 gsm E - Glass chopped strand Mat (CSM), impregnated with orthopthalic polyster resin.The thickness of the skins shall not be less than 1.5mm. Expanded Polystyrene (EPS) structural foam panel of 29mm thickness and a density of	Work done up to the billed quantity and quality is satisfactory

	20 Kg/m3 shall be used as core material. Wooden reinforcements made of Seasoned Salwood block of cross section not less than 28mmx32mm and also necessary salwood reinforcements for fixing the metal fittings such as tower bolts, aldrops, handles, etc, shall be provided. A structural adhesive compatible with EPS foam shall be used for bonding the core materials, the Salwood reinforcement and the skins. The material and process for manufacturing the door shutters shall confirm to RV/TIFAC Composites Design centre Standards and specifications and the door shutters tested in confirmation to IS 4020-1994. The finish of shutters will be plain colour White/Ivory/Beige/Light Grey or any other colour using high quality pigments. Exclusing cost of fixtures and inclusive of supply of shutters to respective work spot. P.No.59, I.No.9.93 of PW,P&IWTD SR 2016-17)	
29	KSRB 9-27.1 : Fixing of door frame in an existing opening including embeeding frame in floor and walls after cutting masonry for holdfasts for embedding holdfast in cement concrete 1:3:6 of 20mm and down size granite metal painting two coats of coal tar to sides of frame, making good the damages to walls and floor as required and disposal of the debries with lead upto 50 m. including cost of materials, labour charges, complete as per specifications. (P.No.57, I.No.9.80 of PW,P&IWTD SR 2016-17)	Work done up to the billed quantity and quality is satisfactory
30	PROVIDING TRAPEZOIDAL PROFILED SHEET Providing and installing of pre painted Galvolume iron Trapezoidal profiled sheet of approved make 1060 mm width (1000 mm cover width), 28-30 mm crest height with crest distance of 200 mm c/c with 2 ribs at the centre for stiffening. The total coated thickness (TCT) of the sheet will be 0.47 mm +/- 0.02 mm tolerance Zinc-Alu Alloy coating AZ150 gsm as per ASTM 1397/A755-550 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 20-22 microns using self drilling/self tapping screws of 25 mm length, to be fixed over the existing purlins, rafters, channels and trusses.. (P.No. 300, I.No. 38.30 of CSR 2016-17)	Work done up to the billed quantity and quality is satisfactory
31	Fabricating, supplying & erecting M.S. angular Truss of span upto 10m. The bottom & top member is provided with 50x50x6mm double equal angles, welded back to back and in between top & bottom line, in areas of mid section is provided with 50x50x6mm equal single angle for vertical and inclined members and at supporting ends 40x40x5mm single angle is provided. All the members are welded together with 6mm gusset plate as per Drawing No.CBS/	Work done up to the billed quantity and quality is satisfactory

	SD/K-Mantap/9/MND/97. The entire truss is anchored in RCC column by using 4 Nos. of M.S. anchor bolts at each support, with 10mm thick base plate and shoe plate.The work includes cutting, straightening, placing in position of M.S angle and wleding wherever necessary, and applying one coat of red oxide primer coat to all the members including cost of all materials, labour charges, & hire charges of machineries for cutting, welding, grinding & erection equipments, etc., complete as per specification (P.No. 41, I.No. 7.30 of CSR 2016-17)	
32	Providing and fixing M.S. Gate as per Chief Architect Drawing, using 50mm x 50mm 14 guage M.S. hollow pipe frame work bent to ornamental shape as shown in the drawing and 35mm x 6mm and 16 x 16mm Square rods for verticals alternatively spaced at 4cms c/c in two halves and 40mmx6mm M.S. flats for horizontal member and at the top cast iron spikes are provided at alternate vertical members asshown in the drawing etc., complete. All the steel surface should be thoroughly cleaned free of rust and painted with anti corrosive paint (shop paint) etc., complete. The work includes cost of all materials, labour charges for all items of work, hire charges for welding, cutting and grinding equipment, and electricity charges, with lead and lift, loading and unloading charges, etc., complete as per specifiocation. (P.No. 42, I.No. 7.37 of CSR 2016-17)	Work done up to the billed quantity and quality is satisfactory
33	KSRB 2-2.2: Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m.and above in width, in hard soil not exceeding 1.5m.in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications. Specification No.KBS 2.1(a)/2.3.5. (P.No.5, I.No.2.4 of PW,P&IWTD S.R 2016-17)	Work done up to the billed quantity and quality is satisfactory
34	KSRB 2-4 : Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 1.5 m. including cost of all labour complete as per specificifictions. (P.No.6, I.No.2.11 of PW,P&IWTD S.R 2016-17)	Work done up to the billed quantity and quality is satisfactory
35	KSRB 12-1.1 : Providing and laying in position to required level or slope 150mm internal diameter salt glazed stoneware pipes grade A and jointing with stiff mixture of cement mortar in proportion of 1:1, testing of pipes and joints, including cost of materials, labour charges complete as per specification. specification No.KBS 12.2.5/12.7.	Work done up to the billed quantity and quality is satisfactory

	(P.No.70, I.No.11.2 of PW,P&IWTD S.R 2016-17)	
36	KSRB 12-8.1 : Constructing brick masonry inspection chamber 600x600mm, and 450mm depth, (clear inside dimension) for single pipeline, using table moulded non-modular bricks of class designation 50 in cement mortar 1:5, C.I cover with frame (light duty) 600x600mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23kg and weight of frame 15 kg) R.C.C. top slab with cement concrete 1:2:4 mix 20mm and downsize granite metal , foundation concrete 1:5:10 with 40mm and downsize granite metal inside plastering 12mm thick with cement mortar 1:3, finish smooth with a floating coat of cement on walls and bed concrete complete as per standard design including cost of materials, labour charges, curing complete as per specifications. Specification No. KBS. (P.No.73, I.No.11.50.1 of PW,P&IWTD S.R 2016-17)	Work done up to the billed quantity and quality is satisfactory
37	KSRB 11-11.4 : Providing and fixing white vitreous china clay, flat back wash basin size 550x400mm with a single 15mm C.P brass pillar tap with C.I / M.S brackets, 32 mm C.P. brass waste of standard pattern, painting of fittings and brackets, cutting and making good the wall and floor wherever required, including cost of materials, labour complete as per specifications. Specification No. KBS 11. (P.No.81, I.No.12.26 of PW,P&IWTD S.R 2016-17)	Work done up to the billed quantity and quality is satisfactory
38	KSRB 11.6: Providing and fixing white vitreous china clay, water closet European type (Pedestal type, S - trap) with balck solid plastic seat and lid, C.P, brass hinges, rubber buffers. 10 litre white glazed / vitreous china clay low level, flushing cistern (all are approved make) with fittings, C.I /M.S brackets, 40mm diameter flush bend with fittings and clamps, overflow arrangements with special and 25mm mosquito proof coupling of approved design, painting of fittings and brackets, cutting and making good the wall and floor wherever required, including cost of materials, labour complete as per specifications.Specification No. KBS 11. (P.No.77, I.No.12.6 of PW,P&IWTD S.R 2016-17)	Work done up to the billed quantity and quality is satisfactory
39	Providing and fixing 7.5 cms to 15.00 cms dia NP grating 100 mm dia. (P.No.88, I.No.12.111 of PW,P&IWTD S.R 2016-17)	Work done up to the billed quantity and quality is satisfactory
40	Providing stoneware gully trap of approved quality and make fixing in CC 1:2:4 and plastering with CM 1:3 wherever necessary.(Rate includes cost of all materials, fixtures and lead). - Providing stoneware gully trap of	Work done up to the billed quantity and quality is satisfactory

	approved quality and make fixing in CC 1:2:4 and plastering with CM 1:3 wherever necessary.(Rate includes cost of all materials, fixtures and lead).--- 10cms x 10cms. (P.No.88, I.No.12.112.1 of PW,P&IWTD S.R 2016-17)	
41	Providing and fixing CI Nahani trap of approved make conforming to ISI specifications and construction of Cistern in CC 1:2:4 as per directions (Rate is inclusive of cost of materials and fixtures and conveyance of materials to work spot). - Providing and fixing CI Nahani trap of approved make conforming to ISI specifications and construction of Cistern in CC 1:2:4 as per directions (Rate is inclusive of cost of materials and fixtures and conveyance of materials to work spot).--- 10cms x 7.5cms. (P.No.88, I.No.12.113.1 of PW,P&IWTD S.R 2016-17)	Work done up to the billed quantity and quality is satisfactory
42	KSRB13-3.2 Providing and fixing in trenches galvanised / mild steel tubes (medium grade) 20mm dia nominal bore with all fittings (earth work in trenches to be measured and paid for separately) including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. Specification No.KBS 13.2.14/13.6. (P.No.90, I.No.13.11 of PW,P&IWTD S.R 2016-17)	Work done up to the billed quantity and quality is satisfactory
43	KSRB13-3.4 Providing and fixing in trenches galvanised / mild steel tubes (medium grade) 32mm dia nominal bore with all fittings (earth work in trenches to be measured and paid for separately) including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. Specification No.KBS 13.2.14/13.6. (P.No.90, I.No.13.13 of PW,P&IWTD S.R 2016-17)	Work done up to the billed quantity and quality is satisfactory
44	KSRB13-6.1-2 Providing and fixing in position brass bib cock of approved quality 20mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No.KBS 13.2.2 / 13.3. (P.No.91, I.No.13.24 of PW,P&IWTD S.R 2016-17)	Work done up to the billed quantity and quality is satisfactory
45	KSRB13-6.3-4 Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) 32mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No.KBS 13.2.6/13.3. (P.No.92, I.No.13.35 of PW,P&IWTD S.R 2016-17)	Work done up to the billed quantity and quality is satisfactory
46	KSRB13-8.1 : Providing and fixing to wall, ceiling and floor, low density polyethylene pipes 6.00 kgf/sq.cm working pressure 20mm outside diameter, compression type fittings, wall clips, making good the wall, ceiling and floor including cost of all materials, labour charges, HOM of equipments and testing,excluding cost of fittings, complete as per specifications. Specification No.KBS	Work done up to the billed quantity and quality is satisfactory

	13.2.15.1/13.9. (P.No.93, I.No.13.66 of PW,P&IWTD S.R 2016-17)	
47	KSRB13-8.3 Providing and fixing to wall, ceiling and floor, low density polyethylene pipes 6.00 kgf/sq.cm working pressure 32mm outside diameter, compression type fittings, wall clips, making good the wall, ceiling and floor including cost of all materials, labour charges, HOM of equipments and testing,excluding cost of fittings, complete as per specifications. Specification No.KBS 13.2.15.1/13.9. (P.No.93, I.No.13.68 of PW,P&IWTD S.R 2016-17)	Work done up to the billed quantity and quality is satisfactory
48	Supplying water storage tanks made of virgin polymer (LLDPE) with two layers outer Black or Blue and inner White layer of approved quality and make, conforming to I.S.I./ISO/SSI specifications. (P.No. 265/ I.No. 37.58 of CSR 2017-18)	Work done up to the billed quantity and quality is satisfactory
49	Concealed Conduit System Supplying……mm dia 2mm/2.5mm thick heavy gauge PVC conduit pipe with suitable size bends, metal/PVC junction boxes adhesive paste etc., and running before concreting the slab. The conduit should be tied to the reinforcement rods by using binding wires and unused ways of junction boxes and pipe ends should be covered using PVC end enclosures. run with 18SWG GI fish wire wherever necessary(2/2)	Work done up to the billed quantity and quality is satisfactory
50	Groove cutting in the wall supplying ….dia 2mm/2.5mm thick heavy gauge PVC Conduit Pipe with bends, metal junction boxes adhesive paste etc.,and bracing U or J hooks and cement plastering up to the surface of the brick level and run with 18 SWG GI fish wire run through out the conduit wherever necessary.(2/3)	Work done up to the billed quantity and quality is satisfactory
51	Point wiring using Copper wire with switch. Supplying and wiring adopting loop system in existing PVC Conduit /casing capping using copper PVC insulated multi strand 2x1.5Sqmm copper wire with a 6Amps flush type SP control switch shall be fixed on the existing plastic sheet/ gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block. complete for each outlet. (3/8)	
	I. Point wiring using class A Materialsa) Short point up to 3Mtr from tapping point to out let via switch	Work done up to the billed quantity and quality is satisfactory
	I. Point wiring using class A Materials b) Medium point above 3Mtr up to 6Mtr from tapping point to out let via switch	Work done up to the billed quantity and quality is satisfactory

	I. Point wiring using class A Materials c) Long point above 6Mtr up to 10Mtr from tapping point to out let via switch	Work done up to the billed quantity and quality is satisfactory
52	Supplying 6A flush/projected type socket and 6 amps flush/projected type SP switch either surface/flush mounting in a existing gang box or in a 4mm thick plastic sheet and fixing over a flush mounted wooden box and wiring using necessary capacity wires as required.(6/12)	Work done up to the billed quantity and quality is satisfactory
53	Supply and fixing of bakelite D.P/Socket/ switch with/without neon indicator over existing wood board or flush mounting in plastic plates/nitches.(6/14)	
	I. Using Group 'A' Material. a) 32Amps Flush/projected type DP switch	Work done up to the billed quantity and quality is satisfactory
	I. Using Group 'A' Material. e) Electronic stepped regulator.	Work done up to the billed quantity and quality is satisfactory
54	Wiring for lighting/power circuit using one of PVC insulated 1100v grade, multistrand Copper conductor single core cable in open or concealed system of wiring .(9/20) I. Group A. c.2.5 sqmm	Work done up to the billed quantity and quality is satisfactory
55	Supplying 4mm thick plastic sheet with necessary nitches for fixing switches regulators etc., and fixing on existing wooden or metal box using N.F. screws.(10/22)	Work done up to the billed quantity and quality is satisfactory
56	Supplying PVC/GI flexible conduit pipe…mm dia fixing on surface over inverted tapered wooden plugs or phill plugs or rawl plugs and clamped using heavy gauge saddles at an interval of 300mm using NF screws and the either end of the pipe terminated completely.(10/25)	Work done up to the billed quantity and quality is satisfactory
57	Extra for supplying 4mm thick white plastic plate and covering for junction boxes of size ……mm conduit using necessary machine screws.(11/26)	Work done up to the billed quantity and quality is satisfactory
58	Supplying And Fixing Metal Fan Box with Round Hook.(11/32)	Work done up to the billed quantity and quality is satisfactory
59	Supplying and fixing a drop light using one PBBC/bakelite pendent holder, PVC insulated twin twisted copper wire of 23/0.0076"upto 1Mtr, one of 60/100 watts lamp of 230 volts grade and one of 5 amps bakelite ceiling rose fixed on the existing wooden block of the outlet.(13/1)	Work done up to the billed quantity and quality is satisfactory
60	Supplying and fixing PBBC bakelite straight or slant batten holder and wiring, within 60w/230 Volts lamps. (13/2)	Work done up to the billed quantity and quality is satisfactory

61	Supply box type fluorescent tube light fitting of 4'- 36/40 watts fluorescent tube fitting, made out of M.S sheet and stove enameled with low loss open construction copper wound ferromagnetic ballast, starter, locking type brass contact holders mounted on double fold type sheet base fully wired for use on 230 Volts A C Supply including fluorescent tube.(16/3)	Work done up to the billed quantity and quality is satisfactory
62	Supplying capacitor type ceiling fan complete with down rod blades, shackle, canopies etc., for operation on 230 volts, 50 cycles. Single phase AC supply conforming to ISS-374-1979 and with double ball bearing system and as per technical data approved.(23/23) 56" Sweep (1400mm) a.Regular model (Khaitan, Crompton Greaves, Orient, Polar, Bajaj, Havells)	Work done up to the billed quantity and quality is satisfactory
63	Fixing all types and all capacities of fluorescent/false ceiling/spot light/CFL fittings indoor on the wall / ceiling/ rafters / girders using 23/0.0076" twin twisted PVC insulated wires, required Nos of round blocks and clamps (if required) (29/7) a) On wall/ceiling/Rafter/Girders	Work done up to the billed quantity and quality is satisfactory
64	Fixing a ceiling/Wall mounting fan of all capacities and all types to the existing S hook with fan regulator to the existing board together with supplying and fixing a 5 amperes ceiling rose, necessary length of 23 / 0.0076 inch PVC insulated twin twisted copper wire and wiring completely. (29/8)	Work done up to the billed quantity and quality is satisfactory
65	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers etc., complete.(32/3) c) 63Amps	Work done up to the billed quantity and quality is satisfactory
66	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required.(36/12)	
	c) 5-32Amps DP Group 'A'	Work done up to the billed quantity and quality is satisfactory
	f) 40-63Amps TPN Group 'A'	Work done up to the billed quantity and quality is satisfactory
67	Supplying and fixing regular MCB distribution boards on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase / 3 phase / single door with powder coated painting etc., complete .(37/13)	Work done up to the billed quantity and quality is satisfactory

	II - Double Doorc) 12Way SP &N Group 'A'	
68	Supplying, fixing and wiring Earth Leakage Miniature Circuit Breaker [ELMCB] 240/450V up to 300mA sensitivity on existing wood/panel board.(38/14) d) 63 Amps 4 pole	Work done up to the billed quantity and quality is satisfactory
69	Supplying ..... amps rated 3phase with neutral bus bar using required capacity electrolytic alluminium strips covered with heat shrinkable coloured PVC sleeve, mounted on phenolic/FRP/DMC insulator which are mounted on powder coated 40x6mm M.S.flat frame work in existing panel board. The bus bar shall have suitable holes for termination of incoming and outgoing cables as per IS specification with necessary botls,nuts and washers etc., complete.(41/36) 250Amps 4x30x10mm Alluminium Strips	Work done up to the billed quantity and quality is satisfactory
70	Fabricating supplying and mounting MS box made out … SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete. (41/38)	
	16 SWG (Panel Board)	Work done up to the billed quantity and quality is satisfactory
	18 SWG (Switch Board)	Work done up to the billed quantity and quality is satisfactory
71	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipments on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit … The pit should be filled with equal proprotion of salt and charcoal 150mm alround the pipe to complete depth. The connection from the pipe to the conduit etc, is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and checknuts etc, the pipe shall have 16 through holes of 122 mm dia.(68/1)	Work done up to the billed quantity and quality is satisfactory

72	Supplying of LT UG cable having aluminium conductor PVC insulated, sheathed, galvanised, steel wire/steel tap armoured cable with PVC outer sheathing 1.1 KV class.(68/4) Class `A' PVC Cable 3.5 core 25 sqmm	Work done up to the billed quantity and quality is satisfactory
73	Labour charges for laying of 1.1 KV class UG cable when supplied agency in existing trench GI pipe / stoneware pipe / on wall / on pole as required.(69/5) In exixting trench/duct. 25 sqmm to 75 sqmm	Work done up to the billed quantity and quality is satisfactory
74	Digging of trench of 0.6m deep x 0.50 mtr wide refiling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7)(70/6) C.C. cutting	Work done up to the billed quantity and quality is satisfactory
75	Supplying and fixing of class A (medium duty) GI pipe of wall thick ness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class.(70/9) 50mm	Work done up to the billed quantity and quality is satisfactory
76	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bituumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc. (70/10)	Work done up to the billed quantity and quality is satisfactory
77	Supplying and running GI/Copper conductor for grounding and (along with other wires in conduit system of wiring) using necessary suitable size clamps, nails, guttas/spacers etc.,(75/23) I) GI Wire c) 8 SWG	Work done up to the billed quantity and quality is satisfactory
78	Removing B.S. slab of Drain and stacking.(P-25, I.No-5.32)	Work done up to the billed quantity and quality is satisfactory
79	Refixing stone slabs of drains and pointing in C.M (1:3).(P-25, I.No-5.33)	Work done up to the billed quantity and quality is satisfactory
80	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neately dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)	Work done up to the billed quantity and quality is satisfactory

81	KSRB 4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.6 of PW,P&IWTD S.R 2016-17)	Work done up to the billed quantity and quality is satisfactory
82	KSRB 5-11 : Providing and constructing load bearing wall with solid concrete blocks of size 400x150x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 4.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications. KBS No.5.4 (P.No.25, I.No.5.26.2 of PW, P&IWTD SR 2016-17)	Work done up to the billed quantity and quality is satisfactory
83	KSRB 5-11 : Providing and constructing non load bearing wall with solid concrete blocks of size 400x100x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 4.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications. KBS No.5.4	Work done up to the billed quantity and quality is satisfactory
84	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications.	Work done up to the billed quantity and quality is satisfactory
85	Providing granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete.(7.5cms thick)(I No-5.31.1,P No-25)	Work done up to the billed quantity and quality is satisfactory
86	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)	Work done up to the billed quantity and quality is satisfactory
87	Providing granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete.(10cms thick)(I No-5.31.2,P No-25)	Work done up to the billed quantity and quality is satisfactory
88	KSRB 5-8.2 : Providing one line dressing to granite stone slab / granite stone masonry as per specifications. KBS 5.1.13 (I No-5.18,P No-23)	Work done up to the billed quantity and quality is satisfactory

89	Providing and fixing Pre cast solid concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including formwork, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc., complete (P.No.25, I.No.5.30 of PW,P&IWTD S.R 2016-17)	Work done up to the billed quantity and quality is satisfactory
90	KSRB 15-15.1 : Providing and applying painting in two coats with plastic emulsion paint of approved brand on wall surface to give an even approved shade after thoroughly brushing the surface, free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour, complete as per specifications. (I No-15.51.1,P No-117)	Work done up to the billed quantity and quality is satisfactory
91	KSRRB M300- Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) MORTH Specification No. 305	Work done up to the billed quantity and quality is satisfactory
92	KSRB 14.6-1: Providing and laying heavy duty cobble stones 70mm thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM of machineries complete as per specifications. Specification No. KBS. (P.No. 101, I.No. 14.7)	Work done up to the billed quantity and quality is satisfactory
93	Providing and Fixing pre cast covering Slab 250mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge. (Data Rate)	Work done up to the billed quantity and quality is satisfactory

94	Weighing Machines - 300kg	Work done up to the billed quantity and quality is satisfactory
95	Weighing Machines - 100kg	Work done up to the billed quantity and quality is satisfactory
96	Baler	Work done up to the billed quantity and quality is satisfactory
97	Storage Racks, Measurement : 17ft x 2ft x 6ft	Work done up to the billed quantity and quality is satisfactory
98	Fire extinguisher	Work done up to the billed quantity and quality is satisfactory
99	First Aid Kit	Work done up to the billed quantity and quality is satisfactory
100	PVC Sacks	Work done up to the billed quantity and quality is satisfactory
101	Office table and Chair	Work done up to the billed quantity and quality is satisfactory
102	Wardrobe	Work done up to the billed quantity and quality is satisfactory
103	Stationary : Books for accounts, paper and pen. White board with pen (marker).	Work done up to the billed quantity and quality is satisfactory
104	Sorting table : 6ft x 12 ft. (Leg 1.2 ft). Use tetra pack on the top and fabrication	Work done up to the billed quantity and quality is satisfactory

105	BESCOM DEPOSIT CHARGES	Work done up to the billed quantity and quality is satisfactory